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ABSTRACT

The types of gasolines having different distillation characteristics and various compositions are identified accurately and rapidly.

A pulse voltage is applied for a predetermined time to a liquid type identifying sensor heater including a heater and an identifying liquid temperature sensor provided in the vicinity of the heater and an identified gasoline is heated by the heater and the liquid type is identified with a voltage output difference V0 corresponding to a temperature difference between an initial temperature and a peak temperature in the identifying liquid temperature sensor.

Furthermore, a gasoline is introduced between electrodes of an alcohol concentration detecting sensor, and a change in a specific inductive capacity of the gasoline between the electrodes is measured with an oscillation frequency thereby detecting an alcohol concentration in the gasoline.

Moreover, based on the alcohol concentration detected by the alcohol concentration detecting device, correcting liquid type identification data in the identification control portion on the basis of alcohol concentration data which are prestored in the identification control portion, thereby identifying a liquid type.